

**Remarks**

This Office Action mailed April 13, 2005 has been fully considered and this Amendment is submitted in response thereto.

Claims 5-14 and 19-28 are now pending in this Application upon entry of this Amendment. Claims 1-3 and 15-17 are newly canceled. No new subject matter has been added to the Application.

The acceptance of the corrected drawings is acknowledged and appreciated.

The objection to the disclosure for informalities amounting to minor draft errors is respectfully traversed.

The objection to the Abstract has been traversed by incorporating the suggestion made by the Office and conforming the Abstract on the separate page to the corrected Abstract appearing above. In the event any further minor discrepancy is noted, the Office is authorized to use the version with the correction marks to resolve any ambiguity.

The rejection of Claims 1, 3, 15, and 17 under 35 U.S.C. 103(a) as being unpatentable over Ozaki et al. (U.S. Patent No. 5,073,911) in view of Hu (U.S. Patent No. 5,377,250) and further in view of Kissinger (U.S. Patent No. 6,185,271) is respectfully traversed.

This rejection no longer applies, as Claims 1, 3, 15, and 17 have been canceled. Thus, it is requested that the rejection of Claims 1, 3, 15, and 17 under 35 U.S.C. 103(a) as being unpatentable over Ozaki et al. in view of Hu and further in view of Kissinger be withdrawn.

The rejection of Claims 2 and 16 under 35 U.S.C. 103(a) as being unpatentable over Ozaki et al. in view of Hu and Kissinger as applied to Claims 1 and 15, and further in view of Johnson et al. (U.S. Patent 5,891,030) is respectfully traversed.

This rejection no longer applies to Claims 2 and 16, which have been canceled. For this reason, it is requested that the rejection of Claims 2 and 16 under 35 U.S.C. 103(a) as being

unpatentable over Ozaki et al. in view of Hu and Kissinger and further in view of Johnson et al.  
be withdrawn.

Applicants gratefully acknowledge the indication of allowable subject matter in Claims 5-14 and 19-28. However, Applicants believe that the Statements of Reasons for the Indication of Allowable Subject Matter in this case is improper as it merely copies each limitation of the claim into the reasons for allowance. While applicant believes that the claims are allowable, applicant does not acquiesce that patentability resides in each feature, exactly as expressed in the claims, nor that each feature is required for patentability.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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METHODS AND APPARATUS FOR DYNAMICAL HELICAL  
SCANNED IMAGE PRODUCTION

ABSTRACT OF THE DISCLOSURE

The present invention provides a method for producing images of an object. The method includes dynamically helically scanning an object on a moving table utilizing a scanning imaging system. During the scan, projection views of the object are acquired and stored together with corresponding table locations. A plane for reconstruction of an image of the object is selected. The stored table locations are used to determine geometric variables applicable to the stored projection views; and the stored projection views are filtered and backprojected utilizing the geometrical variables to reconstruct an image of the object at the reconstruction plane.